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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,487	09/26/2000	Ivy Pei-Shan Hsu	019959-003200US	4335

20350 7590 10/30/2007

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EXAMINER	
SALAD, ABDULLAHI ELMI	
ART UNIT	**PAPER NUMBER**
2157	

MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/670,487	HSU ET AL.	
	Examiner	Art Unit	
	Salad E. Abdullahi	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *70-101* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *70-101* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/0, 8/07, 4/07and 2/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response

1. Applicant's response filed on has been received and made of record

2. Applicant's arguments with respect to claims 70-101, have been fully considered but are not persuasive because of the following reasons

Applicant alleges Andrews does not show any ordering of network addresses based upon round trip time data.

Examiner asserts Logan discloses ordering of network addresses based on plurality of quality of service metrics including response time, priority and weight (see fig, 2 and table I and II). Although Logan does not specifically show using metrics such round trip time to order the network address, however, one ordinary skill would readily recognized using such metric would have been the scope of Logans invention, because round trip metric is normally used load balancing systems such that of Logan's Furthermore, Andrews shows the use of round trip metric QOS metrics[0032 and 0045]. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention presented with teachings of Logan to incorporate the round trip measuring mechanism as suggested by Andrews, thereby selecting nearby content server having the least round trip time for responding to a client request.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 70-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al., U.S. Patent No. 6,578,066[hereinafter Logan] in vie of Andrews et al., US Patent Application Publication No. 2002/0038360[hereinafter Andrews].

As per claims 70 and 91, Logan discloses a method load balancing among host servers a data network, the method comprising:

storing, a load balancing switch of the data network, response time data of the network (see col. 5, lines 3-18 and col. 6, lines 30-41); and

ordering, in the load balancing switch, a plurality of network addresses, the network addresses being responsive to a query regarding a domain name, wherein the load balancing switch is capable of ordering the plurality of network addresses based, least in part, QOS metrics (see tables I and II col. 9, lines 12-35).

Logan is silent regarding: utilizing QOS metrics such as round trip time.

Andrews discloses in analogous art a system and method for locating a closest server in response to a client domain name request including wherein the round trip time data a time for exchanging at least one message between a first host. and a first client machine (see paragraphs 0103-0105 and table 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention presented with teachings of Logan to incorporate the round trip measuring mechanism as suggested by Andrews, thereby selecting nearby content server having the least round trip time for responding to a client request.

As per claims 71-77, Logan discloses the method of claim 70, further comprising:

creating a table, in the load balancing switch, using the round trip time data, wherein the table is indexed by network neighborhood and sending a health check message to each of the plurality of network addresses from the load balancing switch (see tables I and II).

As per claims 78-84, Logan discloses the method of claim 70, wherein the first host server site switch is one of a plurality of host server site switches of the data network, and the first client machine is one of a plurality of client machines of the data network, and further comprising:

storing, in the load balancing switch, round trip time data received from each of the plurality of host server site switches, wherein each said round trip time data is a time for exchanging at least one message between a respective one of the host server site switches and a respective one of the plurality of client machines network (see fig. 2 and col. 6, lines 30-41).

As per claims 86 and 96, Logan discloses A method of load balancing among host servers of a data network, the method comprising:

receiving, at a load balancing switch of the data network, a query regarding a domain name (see col. 5, lines 46-59); and

selecting, from a plurality of network addresses responsive to the request, a best network address based, by the load balancing switch as a best network address in response to previous queries (i.e., server best response time) (see col. 5, lines 46-59 and tables I-IV).

Logan is silent regarding: selecting network addresses that has been least recently selected.

Andrews discloses in analogous art a system and method for locating a closest server in response to a client domain name request including selecting network addresses that has been least recently selected (see paragraphs 0029 and 0032). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention presented with teachings of Logan to incorporate the round trip measuring mechanism as suggested by Andrews, thereby enabling selecting a content server with best response time .

As per claims 87-90, Logan discloses the method of claim 86, further comprising: storing, at the load balancing switch, round trip time data, wherein each said round trip time data is a time for exchanging at least one message between a respective one of a plurality of host server site switches of the data network and a respective one a plurality client machines of the data network (see fig. 2, and col. 6, lines 14-41).

As per claims 92-95, Logan discloses the load balancing switch of claim 91, further comprising:

means for ordering the plurality of network addresses based, at least in part, on which of the network addresses has been least recently selected as a best network address response to previous queries(see tables I and II col. 9, lines 12-35).

As per claim 97-99, Logan discloses the load balancing switch of claim 96, further comprising:

a means for ordering the plurality of network addresses based, at least in part, on a session capacity of a plurality of host server site switches, each said host server site switch being coupled between the load balancing switch and at least one of the host servers(see tables I and II col. 9, lines 12-35).

As per claim 100, Logan discloses a data networking method comprising:

storing, in a host server site switch (202) through which a plurality of host servers (204-212)of a data network are accessed, round trip time data, the round trip time data being a time for exchanging at least one message between the host server site switch and a client machine of the data network (see fig. 2 and col. 6, lines 30-41); and

communicating the round trip time data to a load balancing switch the data network. (see col. 6, lines 51-59).

As per claim 101, Logan discloses the data networking method of claim 100, further comprising communicating a number of sessions of the host server site switch to the load balancing switch (see col. 6, lines 14-30).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CONCLUSION

6. The prior art made of record and relied upon is considered pertinent to the applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E Abdullahi whose telephone number is 571-272-4009. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300.**

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

As
11/12/2006

ABDULLAHI SALAD
PRIMARY EXAMINER